

WHAT IS CLAIMED IS:

1. A method for completing fragments of text, comprising:
obtaining a text fragment;
performing a search, based at least in part on the text fragment, to identify one or more documents;
identifying sentences within the one or more documents that are associated with the text fragment;
determining sentence endings associated with the identified sentences; and
presenting the sentence endings as potential completions for the text fragment.
2. The method of claim 1, wherein the text fragment is one of a partial sentence and a partial paragraph.
3. The method of claim 1, wherein the obtaining a text fragment includes receiving a text fragment from a user.
4. The method of claim 1, wherein the obtaining a text fragment includes automatically detecting a text fragment.
5. The method of claim 1, wherein the performing a search includes searching for documents that include the text fragment as a phrase.

6. The method of claim 1, wherein the performing a search includes searching for documents that include the text fragment and synonyms of one or more words within the text fragment.

7. The method of claim 1, further comprising:
determining whether the one or more documents provide sufficient results;
shortening the text fragment when the one or more documents do not provide sufficient results; and
performing a search, based at least in part on the shortened text fragment, to identify a set of documents.

8. The method of claim 7, wherein the determining whether the one or more documents provide sufficient results includes:
counting a number of the one or more documents, and
determining that the one or more documents do not provide sufficient results when the number of the one or more documents is less than a threshold.

9. The method of claim 7, wherein the shortening the text fragment includes dropping one or more words from a beginning or end of the text fragment.

10. The method of claim 7, wherein the shortening the text fragment includes:
identifying one or more symbols within the text fragment, and

dropping one or more words from the text fragment based on the one or more identified symbols.

11. The method of claim 7, wherein the shortening the text fragment includes:
analyzing a structure of the text fragment, and
dropping one or more words from the text fragment based on the analysis of the structure of the text fragment.

12. The method of claim 1, wherein the identifying sentences within the one or more documents includes determining boundaries of the identified sentences based on punctuation near the identified sentences in the one or more documents.

13. The method of claim 1, further comprising:
trimming at least one of the sentence endings by dropping one or more words from the at least one sentence ending.

14. The method of claim 13, wherein the one or more words are dropped from the at least one sentence ending based on at least one of text and one or more symbols included in the at least one sentence ending.

15. The method of claim 14, further comprising:
generating an inverse document frequency table that includes words common to sentence endings; and

wherein the trimming at least one of the sentence endings includes:

comparing the text of the at least one sentence ending to words in the inverse document frequency table, and

dropping one or more words from the at least one sentence ending based on a result of the comparison.

16. The method of claim 14, wherein the trimming at least one of the sentence endings includes:

identifying the one or more symbols included in the at least one sentence ending, and

dropping one or more words from the at least one sentence ending based on the one or more identified symbols.

17. The method of claim 1, further comprising:

merging two or more of the sentence endings into a merged sentence ending.

18. The method of claim 17, wherein the merging two or more of the sentence endings includes:

identifying two or more of the sentence endings that have text in common, and

merging the identified sentence endings.

19. The method of claim 1, further comprising:

determining quality ones of the sentence endings based, at least in part, on at least one of a table of common beginnings of sentences and a table of common endings of sentences.

20. The method of claim 1, further comprising:
scoring the sentence endings.

21. The method of claim 20, wherein the sentence endings are scored based on popularity.

22. The method of claim 21, wherein the popularity of the sentence endings is based, at least in part, on a number of times that the sentence endings occur within the one or more documents.

23. The method of claim 20, wherein the sentence endings are scored based, at least in part, on a location of where the text fragment occurs within the identified sentences.

24. The method of claim 20, further comprising:
adjusting the scores of the sentence endings based, at least in part, on lengths of the sentence endings.

25. The method of claim 20, further comprising:
adjusting the scores of the sentence endings based, at least in part, on whether at least a portion of the sentence endings are included in a list of bad endings.

26. The method of claim 20, further comprising:

discarding one or more of the sentence endings when at least a portion of the one or more sentence endings is included in a list of bad endings.

27. The method of claim 20, wherein the presenting the sentence endings includes:

ordering the sentence endings based on the scores, and

presenting the ordered sentence endings as potential completions for the text fragment.

28. The method of claim 1, wherein the presenting the sentence endings includes:

providing the sentence endings via a pop-up window.

29. The method of claim 1, wherein the presenting the sentence endings includes:

inserting one of the sentence endings near a location of the text fragment, and

replacing the one of the sentence endings with a subsequent one or more of the sentence endings.

30. A system for automatically completing fragments of text, comprising:

means for receiving a text fragment;

means for identifying documents that include the text fragment;

means for locating sentences within the documents that include at least some of the text fragment;

means for identifying sentence endings associated with the located sentences; and

means for presenting the sentence endings as potential completions for the text fragment.

31. A system for completing fragments of text, comprising:
one or more servers configured to:
 receive a text fragment,
 identify documents that include at least a portion of the text fragment,
 locate sentences within the documents that are associated with the text fragment,
and
 determine sentence completions associated with the located sentences.
32. The system of claim 31, wherein the one or more servers include a plurality of servers.
33. The system of claim 31, wherein the one or more servers are further configured to provide the sentence completions as potential completions for the text fragment.
34. A computer device, comprising:
a memory configured to store code including:
 document preparation code configured to permit a user to prepare or edit a document, and
 assistant code configured to:
 detect a fragment of text within the document,
 obtain a plurality of potential sentence completions for the fragment of text, and

present the potential sentence completions to the user; and
a processor configured to execute the code in the memory.

35. The device of claim 34, wherein when obtaining a plurality of potential sentence completions, the assistant code is configured to:

generate a search query based on the fragment of text,
send the search query to an external server, and
receive the potential sentence completions from the server.

36. The device of claim 34, wherein the document preparation code includes one of word processing code, e-mail code, and instant messenger code.

37. The device of claim 34, wherein when detecting a fragment of text within the document, the assistant code is configured to automatically identify the fragment of text without user instruction.

38. The device of claim 34, wherein when detecting a fragment of text within the document, the assistant code is configured to identify the fragment of text based on user instruction.

39. The device of claim 34, wherein when presenting the potential sentence completions to the user, the assistant code is configured to insert one of the potential sentence

completions into the document and permit the user to view other ones of the potential sentence completions.

40. The device of claim 34, wherein when presenting the potential sentence completions to the user, the assistant code is configured to insert one of the potential sentence completions into the document and replace the one potential sentence completion with a subsequent one or more of the potential sentence completions.

41. A computer device, comprising:
a memory configured to store instructions; and
a processor configured to execute the instructions in the memory to:
obtain a fragment of text,
search for local documents that include at least a portion of the fragment of text,
identify sentences within the local documents that are associated with the
fragment of text,
determine sentence completions associated with the located sentences, and
provide the sentence completions as potential completions for the fragment of
text.

42. The computer device of claim 41, wherein the local documents include at least one of documents stored by the computer device and documents stored in a memory accessible by the computer device.